

AMENDMENTS TO THE CLAIMS

Claim 1 (Currently Amended): A ceramic heater ~~for heating a semiconductor wafer,~~
comprising

a ceramic substrate having two opposing surfaces and a side face, and

a heating element on one of the two opposing surfaces of the ceramic substrate or
inside the ceramic substrate, wherein ~~a heating element is arranged on a surface of a ceramic~~
~~substrate in a disc form or inside the ceramic substrate in a disc form, the thickness of said~~
~~ceramic substrate being over 1.5mm, the diameter of which being 200 mm or more, and~~

the surface roughness R_{max} of the side face of said ceramic substrate ~~being~~ is from
0.1 to 200 μm according to JIS B 0601.

Claim 2 (Currently Amended): The ceramic heater ~~for heating a semiconductor wafer~~
according to claim 1, wherein said surface roughness R_{max} is from 0.5 to 200 μm according
to JIS B 0601.

Claim 3 (Currently Amended): The ceramic heater ~~for heating a semiconductor wafer~~
according to claim 1 ~~or 2~~, wherein said ceramic substrate is fitted into a supporting case.

Claim 4 (Currently Amended): The ceramic heater ~~for heating a semiconductor wafer~~
according to ~~any of claims~~ claim 1 ~~to 3~~, wherein said ceramic substrate is made of a nitride
ceramic.

Claim 5 (Currently Amended): The ceramic heater ~~for heating a semiconductor wafer~~ according to ~~any of claims~~ claim 1 ~~to 3~~, wherein said ceramic substrate is made of a carbide ceramic or an oxide ceramic.

Claims 6-7 (Canceled)

Claim 8 (New): The ceramic heater according to claim 1, wherein the thickness of said ceramic substrate is over 1.5 mm.

Claim 9 (New): The ceramic heater according to claim 1, wherein said ceramic substrate is produced by sintering ceramic powders.

Claim 10 (New): The ceramic heater according to claim 1, further comprising a temperature-measuring element.

Claim 11 (New): The ceramic heater according to claim 1, wherein said ceramic substrate comprises a sintering aid.

Claim 12 (New): The ceramic heater according to claim 1, wherein said heating element comprises two or more circuits.